

RECONFIGURABLE WORKHOLDING FIXTURE

ABSTRACT OF THE DISCLOSURE

A reconfigurable fixture for workpieces is disclosed. It utilizes a flat surface magnetic chuck with modular workpiece supporting, locating and clamping elements that are carefully located on it and held by magnetic attraction to it. These elements are precisely located to hold the workpiece in spaced relation to the chuck surface. Some locating elements are mechanically fixed to the chuck for securing the workpiece from transverse movement on the chuck surface. Preferably, each of the supporting, locating and clamping members are fixed to separate steel bases for magnetic attraction to the chuck. Each base may also carry its own hydraulic actuator for height adjustment of a support element or for height adjustment and closure of a clamping element. These modular elements have locating slots or grooves or the like so that they can be selected from a storage magazine and located on a chuck by numerically controlled mechanisms.